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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/692,833

10/23/2003

J. Rodney Walton

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QUALCOMM INCORPORATED  
5775 MOREHOUSE DR.  
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EXAMINER

NGUYEN, SIMON

ART UNIT

PAPER NUMBER

2618

NOTIFICATION DATE

DELIVERY MODE

05/14/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/692,833	<b>Applicant(s)</b> WALTON ET AL.	
	<b>Examiner</b> SIMON D. NGUYEN	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 19-55 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21, 25-33, 37-45 of copending Application No. 11/932,703. Although the conflicting claims are not identical, they are not patentably distinct from each other because all subject matters in the claimed application are recited in the claims of copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 24-25, 29-30, 37-38, 46-47, and 50-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Atarashi et al. (US 7,072,381 B2).

Regarding claims 24, 29, 37, 46, and 50, Atarashi discloses a receiver for receiving a CDMA signal (figs. 1, 10), comprising: a first processing for receiving data

Art Unit: 2618

symbols (101) (wherein the first processing comprising rake finger 220, coherent detection 141, remodulating part 142, and decision feedback 222) for processing received data symbols to provide remodulated symbols; second processing (path search 30 for detecting the received signal) for receiving the data symbols (110) and the remodulated symbols to provide an output (the output of detected received signal to rake finger 220) (figs. 1, 8, 10, abstract, column 9 lines 22-52, column 11 line 41 to column 12 line 67, column 21 lines 1-41)

Regarding claims 25, 30, 38, 47, 51, Atarashi discloses the first processing comprises a demodulator (coherent detection 141 has a demodulator); encoding part, encoding part, remodulating part (figs. 8, 10).

5. Claims 24-26, 29-30, 37-39, 46-48, and 50-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Schramm (US 7,187,646 B2).

Regarding claim 24, Schramm discloses a receiver for receiving a OFDM signal (figs. 1a, abstract), comprising: first processing (a demodulator (DEMOCRT) and a reencoding/remodulating unit (RENC-REMOD)) for received data symbol (RS) for a data transmission hypothesized ( $H_m$ ) (estimated noise/power of data symbols are considered as hypothesized data symbols) to provide remodulated symbols ( $A_m[k]$ ) that are estimates of transmitted data symbols by channel estimation (CH-EST)(fig. 8); second processing (PZ-DET of fig.7 or ZM-DET of fig.9) the received data symbols ( $R_m[k]$ ) and the remodulated symbols( $A_m[k]$ ) to provide a detector output (Pz of fig.7, or

Art Unit: 2618

Zm[k] of fig.9) that indicates the data transmission (fig.7-9, column 15 line 40 to column 18 line 47).

Regarding claims 29 and 37, these claims are ejected for the same reason as set forth in claim 24 as means/apparatus of method claim 24.

Regarding claims 25, 30, 38, Schramm discloses the first processing having a demodulator, decoder, reencoding/remodulation units (fig. 8) for processing received data symbols and provide remodulated symbols (fig.8) column 15 line 45 to column 18 line 29).

Regarding claims 26, 39, Schramm further discloses a threshold used for the hypothesized data transmission (column 11 line 7, column 20 lines 30-46, column 21 lines 27-30).

Regarding claim 46, this claim is rejected for the same reason as set forth in claim 24, wherein the demodulator and remodulating unit as processors for executing instructions in the receiver is inherently in Schramm's receiver, wherein Schramm further discloses a memory for storing instructions (column 17 lines 19-22) or the memory for storing instructions are inherent in the receiver of Schramm.

Regarding claim 47, this claim is rejected for the same reason as set forth in claim 25.

Regarding claim 48, this claim is rejected for the same reason as set forth in claim 26.

Art Unit: 2618

Regarding claim 50, this claim is rejected for the same reason as set forth in claim 24, wherein a first processor is inherent for the first processing and a second processor is inherent for the second processing.

Regarding claim 51, this claim is rejected for the same reason as set forth in claim 26.

### ***Allowable Subject Matter***

6. Claims 19-23, 28, 31-36, 41-45, 52-53 are allowed.
7. Claims 27, 40, and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Since all claims are still rejected under the Provisional Double Patenting, the above Allowed/Objected Claims in Allowable Subject Matter only be lifted after Applicant has filed a Terminal Disclaimer to disclaim claims in the co-ending application as indicated in the Double Patenting.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 6:00PM.

Art Unit: 2618

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 11, 2010

/SIMON D NGUYEN/

Primary Examiner, Art Unit 2618